

ABSTRACT

An iron-base sintered alloy material for a valve sheet is a material in which a hard particle composed of one or more elements selected from C, Cr, Mo, Co, Si, Ni, S and Fe is dispersed in a base matrix phase, a porosity is 12 to 25% by volume ratio, and a density after sintering is 6.1 to 6.9 g/cm³. Thereby, production of iron oxide at operation of an internal combustion engine is accelerated, and the abrasion resistance is remarkably improved. It is preferable that a base matrix portion containing a base matrix phase and the hard particle has the composition containing a total of 10.0 to 40.0% of one or more selected from Ni, Cr, Mo, Cu, Co, V, Mn, W and C, and the balance substantially Fe. It is preferable that a solid lubricant particle of one or more selected from a sulfide and a fluoride is further dispersed in a base matrix phase at 0.3 to 3.5% by area ratio.